Policy: Establish an office park site on the western edge of Peacock Highlands that links the development to the Kingman Airport Industrial Park.

3. Goal: Establish the reputation of Mohave County and Kingman as a good place to do business.

Policy: Engage in promotional activities highlighting the attributes of Mohave County, in terms of transportation logistics, cost of doing business and lifestyle.

4. Goal: Improve educational level of workforce in Mohave County.

Policy: Work with Mohave County Community College to expand vocational training for targeted industries; promote ultimate goal of four-year college in Mohave County.

### IV. NATURAL RESOURCES



#### A. Water Resources

Rhodes Homes recognizes that water is a precious resource in Mohave County. It is exercising due diligence in proving out adequate groundwater resources for Peacock Highlands, based on well drilling and hydrogeological studies of the Hualapai Valley Basin that will provide both Mohave County and the State of Arizona with a better understanding of water resources in the basin. Ultimately, the Arizona Department of Water Resources (ADWR) will determine, based on these hydro-geological studies and other information, whether the Hualapai Valley Basin aguifer is adequate to support Peacock Highlands as well as current committed demand for water in the region, including pre-platted lots that draw from the same groundwater resources. Rhodes Homes understands that a statement of water adequacy from ADWR is a critical precursor for its development plans at Peacock Highlands. As a matter of general policy, Rhodes Homes is committed to exploring and implementing where feasible technologies and conservation techniques that minimize the impact of the development on groundwater resources, including recharge, xeriscaping and use of "grey water." A detailed water budget will be prepared for Rhodes Homes subdivisions as part of its plan submissions. For purposes of its water use projections, Rhodes Homes is calculating that consumption will average .20 acre feet per capita annually.

Peacock Highlands will be a community known for utilizing water resources that serve the best interests of the Hualapai Valley Basin. Potable water supply issues will always be of paramount importance in the desert. Rhodes Homes recognizes the importance of the potable water resource. In that vein, the Peacock Highlands community will make use of treated wastewater (effluent) for all public spaces and golf courses within the community, as soon as sufficient quantities of treated effluent are available from new subdivisions. If excess effluent is available, it will be directly recharged into the Hualapai Valley Basin aquifer.

Rhodes Homes will provide A+ treated effluent usable for all purposes, including public spaces where children are present. The system will include pipelines, booster pumps and storage facilities as required to deliver the effluent to the public spaces and golf courses. Storage lakes at public spaces and golf courses may be used to provide "amenity" features.

The potable water supply for Peacock Highlands will be designed to service the community on a growth basis. Rhodes Homes has three possible alternatives for the potable water supply system. They include annexation with the City of Kingman (the Peacock Highlands western boundary is adjacent to the City's 2020 Plan area), which would include an expansion of the City's service area to include the Peacock Highlands property. Rhodes Homes also could establish a "Peacock Highlands"

Water Company" or pursue opportunities with private water companies. Both of these latter options require approval through Mohave County and the Arizona Corporation Commission.

The potable water system will be designed to meet system demand and fire flow demand, both in terms of minimum required pressures and quantities. Rhodes Homes will coordinate with the authority having jurisdiction over fire fighting in the development to meet their needs for flow and pressure requirements and fire fighting facilities, including station houses.

1. Goal: Design and construct a safe drinking water system.

Policy: Rhodes Homes will design and construct a drinking water system that meets all ADWR, ADEQ and Mohave County requirements for water quality and quality of the constructed product.

2. Goal: Integrate the Peacock Highlands drinking water system into a regional drinking water system

Policy: As regional development occurs, work with neighbors to develop a regional drinking water system that ties developments together in a common system, either through mutual aid interconnects or a completely integrated system.

3. Goal: Reduce the need for drinking water usage outside the home.

Policy: Construct a waste water treatment plant that provides highquality effluent for use on all open public spaces and golf courses; encourage homeowners to apply xeriscaping to their properties where that is feasible. Sections of Peacock Highlands will be set aside specifically for xeriscape landscaping.

4. Goal: Replenish groundwater resources through recharge.

Policy: Investigate and apply where feasible and effective technologies to capture and inject rainwater runoff into the ground.

# **B.** Air Quality

To preserve air quality, the road network of the Peacock Highlands community is designed to allow free travel to the commercial portions of the development. Businesses will be encouraged to locate within the community to reduce the travel time for commuters.

During construction, the greatest air quality threat is dust. A "Best Management Practices" (BMP) plan is being established to reduce the dust during all phases of construction, and workers will be educated in dust control.

1. Goal: Control smog from commuter traffic.

Policy: Provide opportunities for the business community to develop an internal employment base in the development, starting with planning and design of the master plan, so that daily employment commutes are internal to the development as much as possible.

2. Goal: Control dust pollution during construction.

Policy: Create a BMP which addresses dust control.

## C. Habitat Protection

As part of the due diligence process, a full biological evaluation will be conducted for the community area. This study will allow Rhodes Homes to create a listing of the species of plants and animals currently utilizing the area.

There are a number of large washes crossing the property, some of which will be left open for animal habitat. However, road crossings and drainage conveyance structures will have to be built which will cause impacts. Best efforts will be made to preserve native vegetation and animal habitat in wash areas.

Rhodes Homes has hired SWCA Consultants to do the biological evaluation and file a 404 Permit with the Army Corps of Engineers in March 2005. As part of the 404 Permit process, the Peacock Highlands community is committed to minimizing the disturbance of the washes, and to implement practices which ensure flood waters entering the washes are not contaminated.

Goal: Protect existing flora/fauna.

Policy: Leave washes undisturbed as much as possible.

2. Goal: Protect native wildlife.

Policy: Provide a pathway through the project for the movement of wildlife in and around the property

3. Goal: Protect plant and wildlife long term.

Policy: Construct localized detention/retention basins throughout the community to capture contaminated runoff and keep it from entering the wash system.

# D. Hillside Development

Peacock Highlands will be designed in accordance with Mohave County hillside development standards. Every effort will be made to provide subdivision layouts that minimize erosion potential, maintain slope stability and preserve the natural scenic beauty of the desert area.

1. Goal: Minimize erosion potential

Policy: Provide erosion protection during construction; avoid construction activities in areas of highly steep slope.

Goal: Maintain slope stability

Policy: Prevent construction activity and construction vehicles in highly steep slope areas.

## E. Energy Conservation

Peacock Highlands will be an energy-conscious community. It will encourage its homebuyers to participate in UniSource Energy Services' "SunShare" program for solar-powered homes, reducing reliance on fossil fuel-produced energy and relying on the abundant sunshine of the region to meet home energy needs. In addition, passive solar opportunities and energy-saving building materials will be incorporated into site planning and home construction. As it has in Nevada, Rhodes Homes will build homes in Mohave County that are Energy Star compliant.

UniSource Energy Services' "SunShare" program provides subsidies to homeowners for installation of photovoltaic systems and allows homeowners to sell excess solar energy into the power grid. Peacock Highlands will introduce the "SunShare" program to its homebuyers and promote its benefits. A portion of model homes in Peacock Highlands will be equipped with a solar photovoltaic system and solar hot water stubouts to demonstrate how solar energy can be incorporated into home design, and prospective homebuyers will be provided with information about cost amortization of photovoltaic systems.

Road circulation patterns in Peacock Highlands will be designed to move vehicular traffic efficiently through the development. More importantly, with its town center and village-oriented concepts, Peacock Highlands will be a community where residents can walk or bicycle to shopping and recreation opportunities, reducing vehicle trips.

1. Goal: Expedite and reduce vehicular traffic throughout Peacock Highlands.

Policy: Incorporate street design in Peacock Highlands that moves traffic efficiently through the community; reduce vehicle trips through community design focused on homes within walking distance of shopping and entertainment.

F. Goal: Reduce reliance on fossil fuel-produced energy in favor of solar-produced energy.

Policy: Introduce homebuyers to "SunShare" program to meet home energy needs through solar power. Incorporate photovoltaic systems into model home complexes.

G. Goal: Maximize energy efficiency of homes.

Policy: Design and build homes that can be certified under the Energy Star program as energy efficient.

### V. PUBLIC INFRASTRUCTURE AND FACILITIES

- A. Infrastructure
- 1. Roads
- a. Access Roads

A traffic model was created based upon the "planning bubble" diagrams and the proposed density of the area. The model uses algorithms for the determination of car trips within, from and to the area. Proximity to the Kingman Airport Industrial Park was considered in the traffic analysis. The average number of trips that a community of this size will take for work, play and other purposes, based on national trends, is used. One of the goals of Peacock Highlands is to create a community that has a high degree of self-sufficiency, reducing the number of vehicle trips by residents outside the community for work,

shopping and recreation, and minimizing the impact on Mohave County's road system, in particular Highway 66.

Traffic access to Peacock Highlands will be provided along the existing Highway 66 and I-40 corridors. Highway 66 is the existing major arterial for initial access to this project, and improvements will be examined to meet anticipated increased traffic demands, in conjunction with the City of Kingman's planned widening of Highway 66 to six lanes from I-40 to Northern Avenue Mohave County Drive and its underpass crossing the BNSF railroad tracks would be used to serve western sections of Peacock Highlands. In addition, access from I-40 at the DW Ranch and Blake Ranch interchanges would be constructed during the development of the project, with a 3-mile major arterial from the DW Ranch interchange and a 4 1/2-mile major arterial from the Blake Ranch interchange providing access to southwestern and southeastern sections of Peacock Highlands.

### **b.** Interior Road Network

The design of the interior road network is based upon the "community" theme. This theme includes several north/south arterial streets which pass through the community and east/west arterial streets that serve only the community (which is bounded by Highway 66 on the west and the mountains on the east). Minor arterials will branch from the major arterials into the various subdivisions of the development.

Each subdivision will have at least one access point to the minor arteries. Minor arteries will connect the communities to the major arteries which convey traffic through, in and out of the community.

1. Goal: Provide easy functional access to the community.

Policy: Develop multiple points of ingress/egress. Design the road system so that cars are not all funneled to a single point.

2. Goal: Reduce the number of cars "passing through" the property.

Policy: Design a road network that funnels north/south pass through traffic to the pass-through arterials. Develop the rest of the road network with curvilinear designs that reduce speed and deter pass-through traffic.

3. Goal: Provide an open and scenic driving experience.

Policy: Construct roadways with landscape along the development setback boundaries such that the landscaping decreases noise and

adds aesthetic appeal. Also, construct arterials which have parks, golf courses and other amenities adjacent to enhance the beauty of the existing landscape.

## 2. Water Delivery System

The Peacock Highlands community will be serviced by a well field/ storage/booster pump system through most of the community, with a pumping and storage system on the east end that uses the elevation of the tanks to pressurize and "gravity feed" the eastern portion of the distribution system. The site will be separated into multiple service pressure zones to ensure that fire hydrant capacity and home pressures are adequate. The system will also be looped to ensure water quality and water delivery in case of a localized distribution system break.

When the time is appropriate, an application will be filed with the Arizona Department of Water Resources for a 100-year Adequate Water Supply. This application will outline conservation and wastewater reuse measures in place to minimize groundwater withdrawal.

Open spaces, including the golf course, will be irrigated with reclaimed water from the sewage treatment plant. The reclaimed water system will be instrumental in reducing the amount of groundwater withdrawal. Reclaimed water in excess of what can be utilized will be recharged into the ground using rapid infiltration basins, or recharge wells if applicable.

1. Goal: Provide safe, clean and constant water supply.

Policy: Design and construct a drinking water system that meets all ADWR, ADEQ and Mohave County requirements for water quality and quality of the constructed product.

2. Goal: Provide for full fire service.

Policy: Construct the water system to have adequate pressures and flow capacity to handle fire suppression at any hydrant.

3. Goal: Provide a 100-year adequate water supply.

Policy: Apply for a 100-year Adequate Water Supply certificate from ADWR. The application will be for a water demand equal to or greater than the proposed development.

4. Goal: Conserve water through the use of "grey water."

Policy: Use treated effluent for irrigation of the community's golf course and park spaces

## 3. Sewage Collection and Treatment

The sewage collection system will be gravity fed from east to west, in the direction of the Kingman Airport. The possible exception may be parcels at the west end of Peacock Highlands, which may require a low head lift station to move the sewage back to the gravity system. It is anticipated that sewer trunk main sizing will range from 8" to 36" as the system moves from east to west.

A site has been selected in Parcel 7 for the siting of a sewage treatment plant. The site is located in a commercial/industrial area of the Kingman Airpark Industrial Park. The plant is projected to grow with the community, eventually processing an average daily flow of over 7 million gallons of sewage into high-quality effluent. The effluent will be de-nitrified and can be applied to any open space. A series of infiltration basins will provide disposal of any waters above the needs of the community.

The design of the Peacock Highlands sewage treatment plant will be modular. This allows for the growth of the development in such a way as to balance the capital cost of the facilities while maintaining optimum treatment capacity. As more homes and businesses are constructed, additional capacity will be added to the plant.

An Aquifer Protection Permit (APP) application will be filed with the Arizona Department of Environmental Quality for the plant site. Also, an application for rezoning the site to "MP" will be filed with Mohave County Planning and Zoning when the time is appropriate.

1. Goal: Provide sewage treatment for the entire development area.

Policy: Design and construct a sewage treatment plant that provides high-quality effluent and is capable of being expanded to meet increasing development demands over time.

2. Goal: Maximize reuse of sewage effluent.

Policy: Construct a sewage treatment plant which provides high-quality effluent for use on all public open spaces. Construct a piping system to convey the re-use water to all public open spaces.

3. Goal: Recharge all excess effluent to the Hualapai Basin aquifer.

Policy: Construct rapid infiltration basins and/or recharge wells for the disposal of excess effluent into the Hualapai Basin aguifer.

## 4. Solid Waste Management

For the foreseeable future, Peacock Highlands will utilize the Cerbat Landfill to meet the community's solid waste management needs. This landfill currently has sufficient capacity to maintain operations for another 40-50 years. As Rhodes Homes develops communities in Mohave County, it will monitor the capacity of the Cerbat Landfill and work with county officials to identify future landfill sites.

### 5. Flood control

The Peacock Highlands community is located east of the Mohave Wash. Several wash tributaries cut through the Peacock Highlands alluvium prior to entering the wash, but by and large the Peacock Highlands parcels do not have significant restrictions due to flood plain encroachment.

Flood control through the development is intended to be handled by maximizing use of the washes that cut through the property. This will provide several advantages to the development, including the following: (1) reducing the amount of earthmoving required for flood control; (2) maintaining the natural state of the washes to the maximum extent practicable; (3) trail systems can be developed in or adjacent to the washes, thus improving the development's aesthetic appeal; (4) reduce the overall cost of development.

Within the community, each major subdivision will provide a local detention basin. These basins will typically be designed to be located adjacent to washes. These basins will provide two functions. The first is to remove contaminants from the storm runoff prior to entering the wash. Secondarily, the basins will provide a "peak shaving" function which will decrease erosion potential in the washes.

As part of the engineering of the Peacock Highlands community, an application will be made to re-contour the SFHA boundaries to the development and improvements where these modifications will

enhance flood control. A master drainage study will be prepared for the community; planning/sizing of the infrastructure is already underway.

In conjunction with the master drainage study and flood control improvements, an application under the rules of 404 Permitting will be filed with the United States Army Corps of Engineers (ACOE). This application determines the extents of "waters of the United States" and the extent of disturbance allowed.

1. Goal: Provide a safe environment for the community.

Policy: Combine maximum usage of the existing wash system with intelligent design of peak shaving detention basins and strategic wash improvements to create a flood control system that routes a 100-year flood safely through the development.

2. Goal: Accommodate the ACOE and FEMA.

Policy: Provide applications to the federal agencies early in the process; get them involved in the design of the community.

3. Goal: Protect plant and animal life long term.

Policy: Construct localized detention/retention basins throughout the community to capture contaminated runoff and keep it from entering the wash system.

#### **B. Public Facilities**

## 1. Parks

#### PARK AND RECREATIONAL STANDARDS

Parks, recreation and open space facilities will be provided for Peacock Highlands in concert with the national standards shown in the following tables:

Feature	Park System	Units Needed	Acres
Category	Feature	per	Per 1,000
		1,000 residents	Residents
Parks	Pocket Parks –Min. 1/3 acre	Service Area- 1/4 mile radius	.25
Parks	Neighborhood Parks  – Min. 4 acres	Service area - ½ mile radius	.5 acres per 1,000 Serves 2,500 min.
Parks	Community – Min. 20 acres	Service area - 2 mile radius	1-2 acres per 1,000 Serves min. 10,000
Community Center	3 acres and 10,000 sq. ft.		1 per 20,000
Outdoor Recreation	Small Skate park	.16	.03
	Full Sized Skate park	.06	.03
	BMX Track	.16	.50
	Paved Multi-Use Trail (per mile)	1.04	2.53
	Dirt/Gravel Multi-Use Trail (per mile)	2.33	4.25
	Family Picnic Area	6.25	.08
	Group Picnic Area with Shelter	.36	.74
	Park Bench	7.69	.00
	Outdoor Events Venue (per acre)	.42	1.34

Source: Small Community Parks & Recreation Planning Standards – 2003.

Facility/Activity	Recommended Space Requirements	No. of Units per Population	Service Radius
Basketball	2,400 to 7,280 sq. ft.	1 per 5,000	1/4 to 1/2 mile
Handball	800 to 1,000 sq. ft.	1 per 20,000	15 to 30 minute travel time
Ice Hockey	22,000 sq. ft.	1 per 100,000	½ to 1 hr travel time
Tennis	2 acres per complex	1 court per 2,000	1/4 to 1/2 mile
Volleyball	Minimum 4,000 sq. ft.	1 per 5,000	1/4 to 1/2 mile
Baseball	1.2 acre	1 per 5,000 Lighted 1 per 30,000	1/4 to 1/2 mile
Field Hockey	1.5 acre	1 per 20,000	15 to 30 min. travel time
Football	1.5 acre	1 per 20,000	15 to 30 min. travel time
Soccer	1.7 to 2.1 acres	1 per 10,000	1-2 miles
Golf driving range	13.5 acres	1 per 50,000	30 min. travel time
1.4 mile running track	4.3 acres	.1 per 20,000	15 to 30 min. travel time
Multiple Recreation court	9, 840 sq. ft.	1 per 10,000	1-2 miles
Trails		1 system per region	
Archery Range	.65 acres	1 per 50,000	30 min. travel time
Golf 18 holes	110 acres min.	1 per 50,000	½ to 1 hr. travel time
Swimming Pools	½ to 2 acres	1 per 20,000	15 to 30 min. travel time

Lancaster, R.A. (Ed.).(1990). Recreation, Park, and Open Space Standards and Guidelines. Ashburn, VA: National Recreation Source:

and Park Association

Substantial acreage is allocated for park facilities at Peacock Highlands. These will include several community parks,

neighborhood parks, and a number of linear and mini-parks located throughout the project. It is anticipated that community recreation centers will be provided central to the community. Three golf courses are planned: two in the active adult communities in the south-central part of the site and one in the more exclusive eastern portion of the site. Walking paths will link residential areas to the office, park, and community facilities on site.

# Parks and Open Space Goals and Policies

Mohave County General Plan Goal 55: To meet the recreational and open space needs of residents countywide, with sites that provide for active recreation, specialized recreational opportunities and enjoyment of natural areas.

Policy: The applicant will work with Mohave County school districts in the development, maintenance and joint operation of local school/park sites where it is economically and functionally desirable to do so.

Policy: Provide a full range of parks and recreational facilities for the broad range of housing and lifestyle types available at Peacock Highlands.

Goal 15: Provide all manner of park sites from the pocket park to the neighborhood park and the community park within the Peacock Highlands development.

Policy: Provide a community park in each village and neighborhood and pocket parks within each neighborhood consistent with the standards referenced above.

Policy: Dedicate park sites at the time of subdivision after consultation with Mohave County on final park size and location to serve final projected population.

Policy: Provide outdoor gathering spaces in the form of a town green or plaza, linear parks, community gardens, gazebos, and passive open space areas.

#### 2. Fire Protection

Mohave County General Plan Goal 57:To plan and provide for adequate fire protection services at levels appropriate to the County's urban, suburban, and rural areas.

Policy: Work closely with the area Fire Department to determine an adequate urban level of fire protection services.

Policy: Provide fire protection site within Peacock Highlands planned community, if determined necessary in conjunction with the appropriate Fire Department.

### 3. Police Protection

Mohave County General Plan Goal 57:To plan and provide for adequate police protection services at levels that are appropriate to the County's Urban, Suburban, and Rural areas.

Policy: Work closely with the area police and sheriff's departments to determine an adequate urban level of police protection services.

Policy: Dedicate police protection site within the Peacock Highlands planned community, if determined necessary in conjunction with the appropriate police/sheriff's department.

# 4. Library Services

Mohave County General Plan Goal: To provide a full service library system that is easily accessible and supplies residents with a variety of educational and recreational materials.

Policy: Mohave County should expand library services by planning space for station libraries as part of public buildings in outlying communities.

Policy: The applicant will work with Mohave County to provide a site for library facilities within Peacock Highlands.

#### 5. Schools

Goal: Establish new school sites in the Peacock Highlands development to serve the needs of the community's new families.

Policy: Place new high school(s) on Recreation and Public Purpose (R & PP) sites set aside by the Bureau of Land Management where available to serve the Peacock Highlands project.

Policy: Set aside parcels for elementary and middle school sites during the subdivision review process as agreed upon with the Mohave Valley Elementary District and the Mohave Union High School Districts and the Superintendent of Schools. Work with school districts to time school construction with development of the community.

